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NOTES ON THE CASPER MOUNTAIN CHROMITE DEPOSITS

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Location and accessibility.- The chromite deposits are located in the SW $\frac{1}{4}$ sec. 16, SE $\frac{1}{4}$ sec. 17, and NE $\frac{1}{4}$ sec. 20, T. 32 N., R. 79 W., Sixth Principal Meridian, Natrona County, Wyoming. The nearest rail point is Casper. From here a good graded road extends southward across fairly flat country to the base of Casper Mountain, ascends the north fact of the mountain, which is several thousand feet high, and reaches the chromite deposits at the C.C.C. camp. The distance from Casper to the deposits is approximately ten miles. The best exposures of the chromite are situated approximately 800 feet southwest of the southwest building of the C.C.C. camp.

General geology.- Casper Mountain, the western end of the Laramie Range, is an anticline with westward trend. The Paleozoic and Mesozoic sediments have been eroded from the crest, exposing the pre-Cambrian core over an area of several square miles. The pre-Cambrian rocks consist of quartzites, schists, metadiabases, granite gneisses, peridotites altered to rock serpentine and chrysotile, and granites and granite pegmatites, which cut the metamorphics. In some places the serpentine masses, especially near their contacts with granites and granite gneisses, have been converted to talc schist.

Chromite deposits.- A lens of talc schist approximately 2,500 feet long and of maximum width of 350 feet extends from the vicinity of the NW cor., NE $\frac{1}{4}$ sec. 20

eastward for approximately 1,000 feet, turns to the northeast so that the south margin of the lens passes about 100 feet north of the NE cor. sec. 20, and continues into the SW $\frac{1}{4}$ sec. 16, where the lens pinches out. The talc schist contains disseminated chromite in small quantities throughout. In the NE $\frac{1}{4}$ sec. 20 the lens is about 200 feet wide, and here shallow trenches have been cut across the strike of the talc schist lens. The trenches show bunches and "kidneys" of chromite containing little or no talcose material, and up to 3 or 4 feet wide, bunches are generally flattened with their widths extending northward normal to the boundary of the talc schists. Because of the small number of trenches on the property it is not possible to obtain reliable figures on the average length and depth of the chromite bunches, nor to make any accurate estimates as to what percentage of the talc schist mass consists of fairly pure chromite.

Ownership and development.- It was reported to the writer by men living on Casper Mountain that there are several patented claims on the western part of the deposit in sec. 20. The writer does not know who are the owners. There has been no commercial operation of the property. Development has been confined to trenching.